

WHAT IS CLAIMED IS:

1. (Currently amended). A method of forming a VCSEL having a plurality of layers, comprising:

forming an annular ohmic intracavity contact pad adjacent an optical cavity;

forming a mesa in at least a portion of said plurality of VCSEL layers in accordance with said annular ohmic intracavity contact pad to expose an oxide aperture layer, wherein forming said mesa comprises etching at least a portion of said plurality of VCSEL layers using said annular ohmic intracavity contact pad as an etch mask to define mesa sidewalls; and

oxidizing said oxide aperture layer to form an oxide aperture that is self-aligned with said annular ohmic intracavity contact pad.

2. (Currently amended). The method of claim 1 further comprising forming a photoresist layer adjacent said annular ohmic intracavity contact pad prior to etching at least a portion of said plurality of VCSEL layers, ~~and wherein forming a mesa in at least a portion of said plurality of VCSEL layers comprises etching at least a portion of said plurality of VCSEL layers using said annular ohmic intracavity contact pad as an etch mask to define mesa sidewalls.~~

3. (Original). The method of claim 1 further comprising forming an upper mirror adjacent said annular ohmic intracavity contact pad and said optical cavity.

4. (Original). The method of claim 1 wherein said optical cavity comprises an active region comprising one or more active layers.

5. (Original). The method of claim 4 wherein said optical cavity further comprises a delta doped upper cladding and wherein said ohmic contact is formed adjacent said delta doped upper cladding to reduce contact resistance of said annular ohmic contact.

6. (Original). The method of claim 1 further comprising forming a dielectric spacer layer adjacent said optical cavity.

7. (Original). The method of claim 6 further comprising forming a multi-step photoresist adjacent said dielectric spacer layer and patterning said multi-step photoresist to define a via in said dielectric spacer layer for formation of said annular ohmic intracavity contact adjacent said optical cavity.